

## Reptiles

### Milksnake (*Lampropeltis triangulum*)

State Rank: S2  
 Global Rank: G5

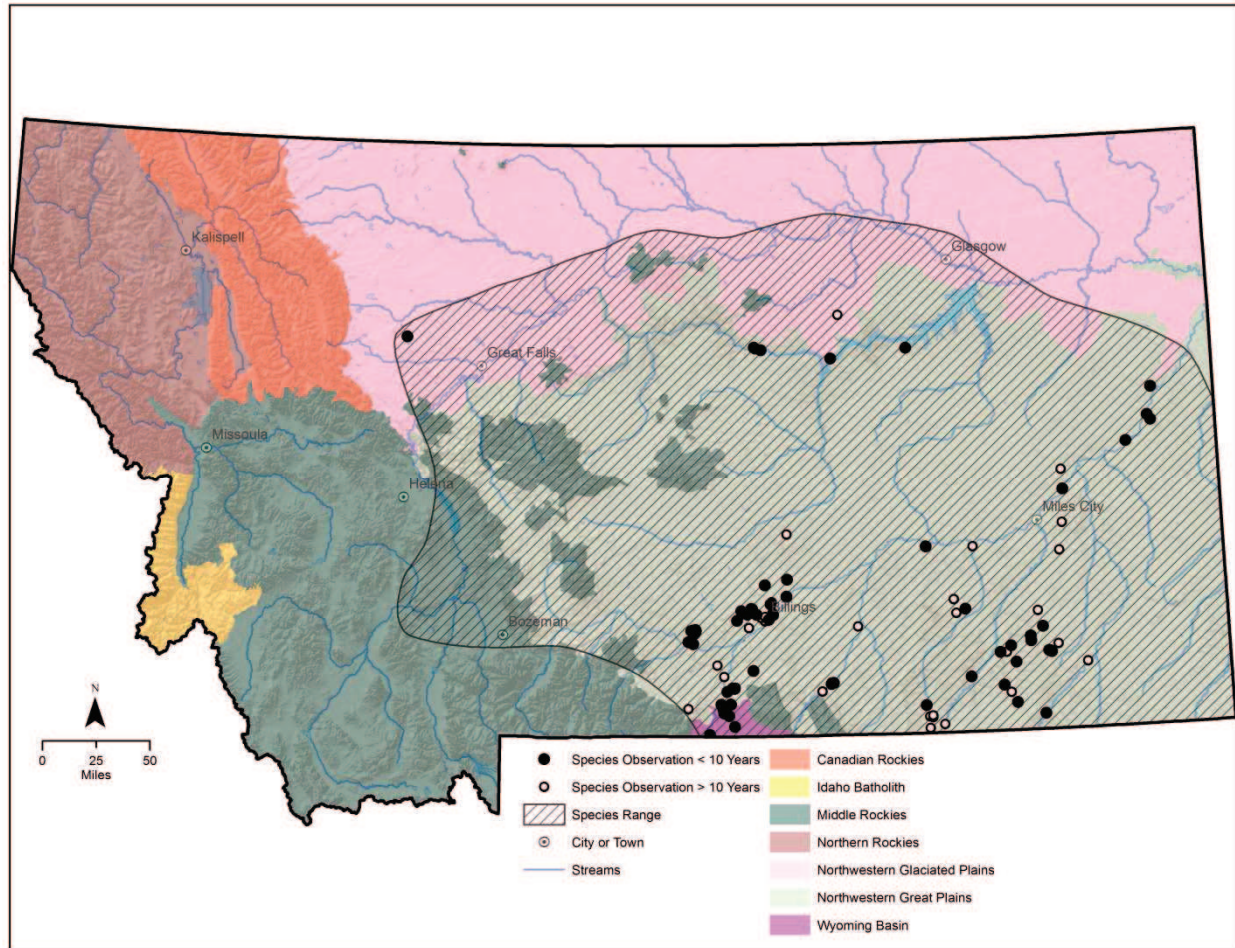


Figure 64. Montana range and observations of the milksnake

### Habitat

Little specific information is available. Milksnakes have been reported in areas of open sagebrush grassland habitat (Dood 1980) and ponderosa pine savannah with sandy soils (Hendricks 1999; B. Maxell, personal communication; L. Vitt, personal communication), most often in or near areas of rocky outcrops and hillsides or badland scarps, sometimes within city limits.

### Management

So few recent milksnake records exist for Montana (Maxell et al. 2003) that it is difficult to determine if management activity is needed. Nevertheless, the widely scattered recent records indicate that milksnakes continue to occupy a large part of the known range in the state, and some sites near a large urban center have remained occupied for the last 40 to 45 years (L. Vitt, personal communication). Management for this species is hampered by a lack of basic information on abundance, food habits, and habitat associations.

Management Plan

None

**Milksnake Current Impacts, Future Threats, and Conservation Actions**

<b>Current Impacts</b>	<b>Future Threats</b>	<b>Conservation Actions</b>
Distribution, status, and biology are poorly understood	Distribution, status, and biology are poorly understood	Develop a comprehensive taxonomic management plan (e.g., for reptiles) that includes the milksnake  Specifically survey for this species in suitable habitat to further define its range in Montana
Pet trade industry	Pet trade industry	Increase public education and information on reptile biology and raise awareness of the importance of den and nest sites

Additional Citations

Dood, A. R. 1980. Terry badlands nongame survey and inventory: final report. (BLM Contract #YA-512-CT8-217.) Montana Department of Fish, Wildlife & Parks. 70 pp.

Hendricks, P. 1999. Amphibian and reptile survey of the Bureau of Land Management, Miles City District, Montana. Montana Natural Heritage Program, Helena, Montana. 80 pp.

Maxell, B., K. J. Werner, P. Hendricks, and D. Flath. 2003. Herpetology in Montana: a history, status summary, checklists, dichotomous keys, accounts for native, potentially native, and exotic species, and indexed bibliography. Olympia, Washington: Society for Northwestern Vertebrate Biology. Northwest Fauna 5:1–138.

Smooth Greensnake (*Opheodrys vernalis*)  
 Species of Greatest Inventory Need

State Rank: S2  
 Global Rank: G5

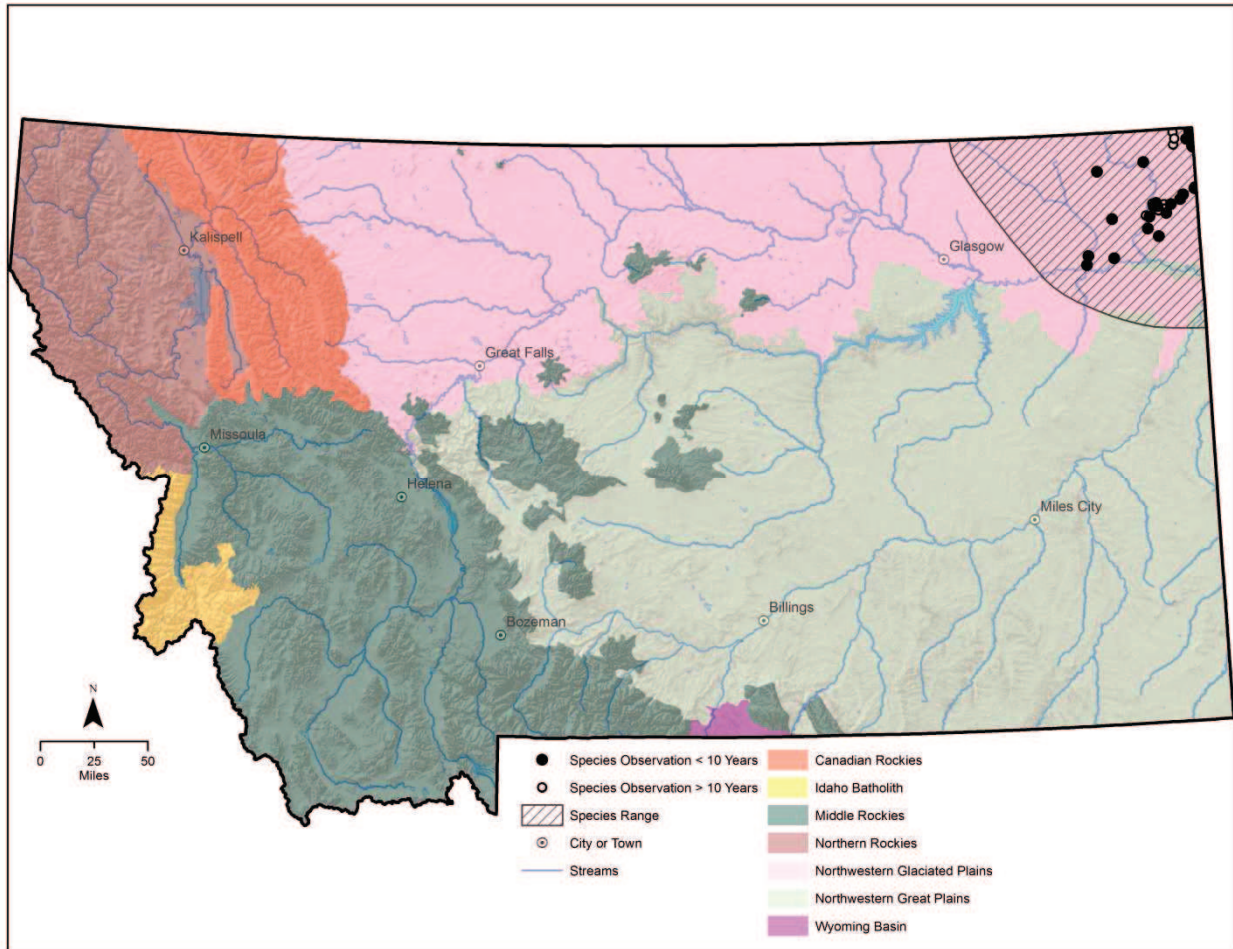


Figure 65. Montana range and observations of the smooth greensnake

Habitat

Little information is available for the species in Montana, though it has been reported on residential lawns, in city parks, along ditches in the prairie pothole region, and around wetland complexes. Based upon observations outside Montana, the smooth greensnake is known to occupy meadows, grassy marshes, moist grassy fields at forest edges, mountain shrublands, stream borders, bogs, open moist woodlands, abandoned farmlands, and vacant lots. Periods of inactivity are spent underground, beneath woody debris and rocks or in rotting wood. Smooth greensnakes have been found hibernating in abandoned ant mounds. Most activity is restricted to the ground, but they may climb into low vegetation and sometimes enter water (Hammerson 1999). This species may also be found in damp meadows bordering streams and lakes as well as drier, rocky areas, but usually only if grass or similar vegetation is present.

Management Plan

None

### Smooth Greensnake Current Impacts, Future Threats, and Conservation Actions

Current Impacts	Future Threats	Conservation Actions
Distribution, status, and biology in Montana are poorly understood  Lacks baseline survey		Develop a comprehensive taxonomic management plan (e.g., for reptiles) that includes the smooth greensnake  Specifically survey for this species in suitable habitat to further define its range in Montana
Conversion of native habitat to cropland agriculture	Conversion of native habitat to cropland agriculture	Protect habitat that is at highest risk of conversion to cropland through the possible use of easements acquisition  Work with landowners and land management agencies to limit activities that may be detrimental to this species
Oil and gas development	Oil and gas development	Follow recommendations in FWP's <i>Fish and Wildlife Recommendations for Oil and Gas Development in Montana</i> (FWP In prep)
Pet trade industry	Pet trade industry	Increase public education and information on reptile biology and raise awareness of the importance of den and nest sites
Wetland degradation or loss	Wetland degradation or loss	Work with landowners and land management agencies to limit activities that may be detrimental to this species

#### Additional Citations

Hammerson, G. A. 1999. Amphibians and reptiles in Colorado. 2nd ed. University Press of Colorado, Boulder, Colorado. 484 pp + xxvi.

Montana Fish, Wildlife & Parks. In prep. Fish and Wildlife Recommendations for Oil and Gas Development in Montana.



Western Hog-nosed Snake (*Heterodon nasicus*)  
Species of Greatest Inventory Need

State Rank: S2  
Global Rank: G5

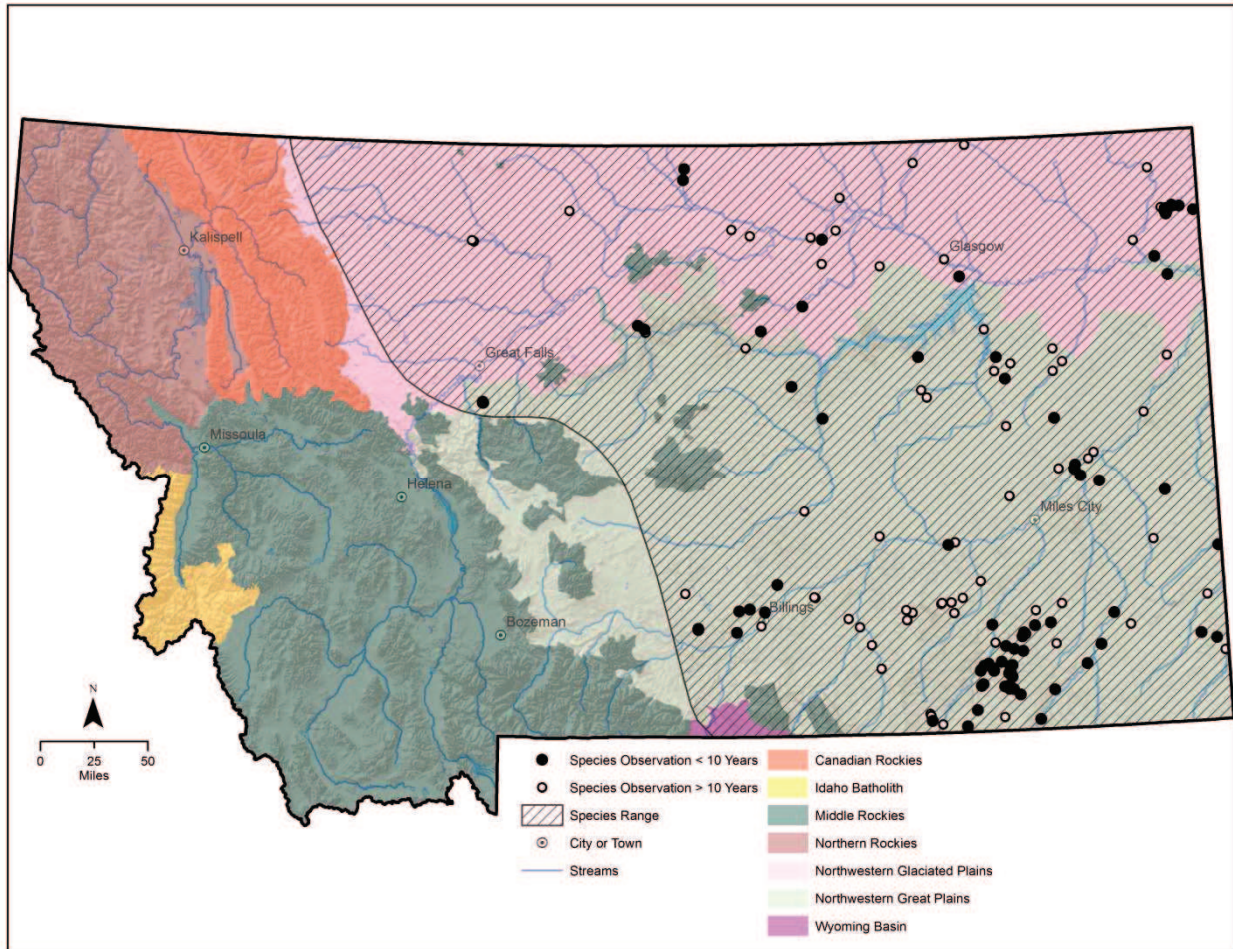


Figure 66. Montana range and observations of the western hog-nosed snake

Habitat

Little specific information for the state is available. Western hog-nosed snakes have been reported in areas of sagebrush grassland habitat (Dood 1980) and near pine savannah in grassland underlain by sandy soil (Reichel 1995; Hendricks 1999).

In other locations, their apparent preference for arid areas, farmlands, and floodplains, particularly those with gravelly or sandy soil, has been noted. They occupy burrows or dig into soil and can be found under rocks or debris during periods of inactivity (Baxter and Stone 1985; Hammerson 1999; Stebbins 2003).

Management

Apparently the western hog-nosed Snake was relatively abundant in Montana during the late 19th Century, at least in some regions; in 1876 it was the third most common reptile (after the prairie rattlesnake and greater short-horned lizard) along the Missouri River between Fort Benton and the mouth of the Judith River (Cope 1879). The few recent records suggest now the species is uncommon throughout Montana, although its status is largely unknown. Even though this

snake is still encountered across its historical range, it is less abundant than in the 19th century probably due to extensive habitat loss associated with conversion of prairie to agricultural landscapes. As in other regions, an unknown percentage of local populations experiences road mortality, as many specimen and observation records are of road-killed individuals. Draining of prairie wetlands may have negative impacts on the prey (toads and frogs particularly, and perhaps turtle eggs) this snake prefers. Management in Montana for this species is hampered by a lack of basic information on abundance, food habits, and habitat associations, but is probably best effected for the long-term by protecting suitable prairie habitats from conversion to agricultural uses.

#### Management Plan

None

#### **Western Hog-nosed Snake Current Impacts, Future Threats, and Conservation Actions**

<b>Current Impacts</b>	<b>Future Threats</b>	<b>Conservation Actions</b>
Distribution, status, and habitat uses are poorly understood  Lacks baseline survey		Develop a comprehensive taxonomic management plan (e.g., for reptiles) that includes the western hog-nosed snake  Target species for survey and inventory suitable habitat to further define its range in Montana
Declines in prey (amphibians)	Declines in prey (amphibians)	Survey for both western hog-nosed snakes and their prey base in suitable habitat to continue determining their abundance and range in Montana, as well as availability of prey  Work with landowners and other agencies to limit activities that may be detrimental to wetlands and amphibians
Dependent on natural flood regimes that provide gravel and sandy beaches in which they and their amphibian prey can burrow	Dependent on natural flood regimes that provide gravel and sandy beaches in which they and their amphibian prey can burrow	Maintain natural flood regime  Work with landowners and other agencies to establish natural flows
Pet trade industry	Pet trade industry	Increase public education on reptile biology and raise awareness of the importance of den and nest sites
Some evidence for declines are potentially associated with habitat loss	Some evidence for declines are potentially associated with habitat loss	Work with landowners and land management agencies to limit activities that may be detrimental to wetlands and amphibians

Additional Citations

- Baxter, G. T., and M. D. Stone. 1985. Amphibians and reptiles of Wyoming. 2nd ed. Wyoming Game and Fish Department, Cheyenne, Wyoming.
- Cope, E. D. 1879. A contribution to and zoology of Montana. *American Naturalist* 13(7):432–441.
- Dood, A. R. 1980. Terry badlands nongame survey and inventory: final report. (BLM Contract #YA-512-CT8-217.) Montana Department of Fish, Wildlife & Parks. 70 pp.
- Hammerson, G. A. 1999. Amphibians and reptiles in Colorado. 2nd ed. University Press of Colorado, Boulder, Colorado.
- Hendricks, P. 1999. Amphibian and reptile survey of the Bureau of Land Management, Miles City District, Montana. Montana Natural Heritage Program, Helena, Montana. 80 pp.
- Reichel, J. D. 1995. Preliminary amphibian and reptile survey of the Sioux District of the Custer National Forest: 1994. Montana Natural Heritage Program. Helena, Montana. 75 pp.
- Stebbins, R. C. 2003. A field guide to western reptiles and amphibians. 3rd ed. Houghton Mifflin Company, Boston, Massachusetts.